

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR 02/04459

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G21F5/012 G21F5/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G21F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | DE 196 31 179 A (REEL SA) 6 February 1997 (1997-02-06) column 2, line 54 -column 4, line 12; figures 1,2 --- | 1-8, 15-17 |
| X | US 6 134 290 A (OZAWA TAMOTSU ET AL) 17 October 2000 (2000-10-17) column 10, line 26-61 column 11, line 8-53 column 12, line 60-64 column 15, line 14 -column 16, line 27 column 27, line 63 -column 28, line 51; figures 1-6,19 --- -/-- | 1-4,6,7, 15-17 |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

12 August 2003

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21/08/2003

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|--|-----------------------|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | PATENT ABSTRACTS OF JAPAN vol. 1996, no. 02, 29 February 1996 (1996-02-29) & JP 07 280990 A (TOSHIBA CORP), 27 October 1995 (1995-10-27) | 1,4,6, 15,16 |
| A | abstract; figures 1-6 ---- | 2,3,7 |
| X | DE 32 33 911 A (KRAFTWERK UNION AG) 15 March 1984 (1984-03-15) | 1 |
| A | page 3, line 29 -page 4, line 32; figures 1-3 ---- | 6,15 |
| X | US 6 128 360 A (OZAWA TAMOTSU ET AL) 3 October 2000 (2000-10-03) | 1-6, 15-17 |
| A | column 13, line 23 -column 14, line 54 column 17, line 43-54; figures 1-8,12-14,22-25,29,30 & FR 2 760 562 A 11 September 1998 (1998-09-11) cited in the application ----- | 18-20 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR 02/04459

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|--|--|
| DE 19631179 | A | 06-02-1997 | FR 2737598 A1 DE 19631179 A1 JP 9113687 A | 07-02-1997 06-02-1997 02-05-1997 |
| US 6134290 | A | 17-10-2000 | JP 3142493 B2 JP 10268081 A JP 3080894 B2 JP 10239489 A BE 1011402 A3 FR 2758646 A1 US 6108392 A | 07-03-2001 09-10-1998 28-08-2000 11-09-1998 03-08-1999 24-07-1998 22-08-2000 |
| JP 07280990 | A | 27-10-1995 | NONE | |
| DE 3233911 | A | 15-03-1984 | DE 3233911 A1 | 15-03-1984 |
| US 6128360 | A | 03-10-2000 | JP 3080895 B2 JP 10246796 A JP 11242093 A BE 1011646 A3 FR 2760562 A1 | 28-08-2000 14-09-1998 07-09-1999 09-11-1999 11-09-1998 |